

Docket No. P-4628-3-C1-3-C1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of Thomas J. Kennedy, III et al.

Serial No.: 10/074,665

Examiner: R. Gorden

Filing Date: February 13, 2002

Group Art Unit: 3711

For: MULTI-LAYER GOLF BALL

Mail Stop BPAI
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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SEP 11 2003

Sir:

FEE TRANSMITTAL LETTER

1. Transmitted herewith is an Appeal Brief for this application.

STATUS

2. Appellant is not a small entity.

3. The proceedings herein are for a patent application and the provisions of 37 C.F.R. 1.136 apply.

a. XXX Appellant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.

b. It is hereby petitioned that any required extension of time be granted for filing the amendment. An extension of () month having a fee of \$ appears required, extending the time for response to .

OFFICIAL**CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. 1.8a)**

I hereby certify that this Fee Transmittal Letter and the documents referred to as attached therein are being transmitted by facsimile on this date September 11, 2003, to TC3700 at 703-872-9303 addressed to: Mail Stop: BPAI, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.


Michelle Bugbee

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4. The fee for filing a brief in support of an appeal is \$320.00. (37 C.F.R. § 1.17(c)).

FEE PAYMENT

5. Attached is a check in the sum of \$ _____.
OR

XX Charge Account No. 17-0150 the sum of \$ 320.00. (Total Fee for Filing Brief &/or Extension Fee)

FEE DEFICIENCY

6. **XX** If any additional extension fee is required, charge Account No. 17-0150.

Respectfully submitted,

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Docket No. P-4628-3-C1-3-C1

#13 Appeal Brief
LMORGAN
11/18/03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of Thomas J. Kennedy, III et al.

Serial No.: 10/074,665

Examiner: R. Gorden

Filing Date: February 13, 2002

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For: MULTI-LAYER GOLF BALL

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

APPEAL BRIEF UNDER 37 C.F.R. § 1.192

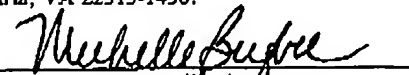
This Appeal Brief is in furtherance of the Notice of Appeal that was filed for the above-referenced application on July 16, 2003.

The fees required under § 1.17, and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying Fee Transmittal.

Appellant files herewith an Appeal Brief in connection with the above-identified application, wherein claims 46 to 53 were finally rejected in the Office Action of April 16, 2003. What follows is Appellant's Appeal Brief in accordance with 37 C.F.R. § 1.192(a).

CERTIFICATION UNDER 37 C.F.R. 1.8

I hereby certify that this Appeal Brief and the documents referred to as attached therein are being transmitted by facsimile on this date September 11, 2003, to TC3700 at 703-872-9303 addressed to: Mail Stop: BPAI, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.


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I. REAL PARTY IN INTEREST (37 C.F.R. § 1.192(c)(1))

The real parties in interest in this appeal are the inventors named in the caption of this brief (Thomas J. Kennedy, III et al.) and the assignee, The Top-Flite Golf Company.

II. RELATED APPEALS AND INTERFERENCES (37 C.F.R. § 1.192(c)(2))

Currently, it is believed that there are no other appeals or interferences in process or pending before the U.S. Patent and Trademark Office from which the present application bases its priority, or any case which bases its priority upon the present application, that will directly affect or be affected by or have a bearing on the Board's decision in this Appeal.

Appellant notes that a Notice of Appeal has been filed for U.S. Application Serial No. 10/074,849 filed February 13, 2002. The above-mentioned application claims priority from one or more of the applications upon which the present application claims priority. Although the present application is not directly related to the above-mentioned application, Appellant cites the case in order to bring it to the Board's attention.

III. STATUS OF CLAIMS (37 C.F.R. § 1.192(c)(3))

The status of claims set forth after the Final Office Action mailed April 16, 2003 and the Advisory Action mailed July 9, 2003 was, and is, as follows:

Allowed claims: none

Withdrawn claims: 27 to 45

Rejected claims: 46 to 53

The present appeal is directed specifically to claims 46 to 53.

IV. STATUS OF AMENDMENTS (37 C.F.R. § 1.192(c)(4))

In the Final Office Action of April 16, 2003, the Examiner rejected claims 46 to 50, 52 and 53 under 35 U.S.C. § 102(b) as being anticipated by Nesbitt (4,431,193); and claim 51 under 35 U.S.C. § 103(a) as being unpatentable over Nesbitt (4,431,193) in view of Sullivan (5,098,105). Claims 46 to 53 were also rejected under the judicially created doctrine of obviousness-

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type double patenting as being unpatentable over claims 1 to 42 of U.S. Patent No. 6,213,894.

There are no unentered amendments.

V. SUMMARY OF THE INVENTION (37 C.F.R. § 1.192(c)(5))

The present invention is directed to a golf ball comprising a core; an inner cover layer which has a Shore D hardness of at least 60 as measured on the curved surface thereof and is formed from a composition which includes at least one material selected from the group consisting of polyphenylene ether/ionomer blends, ionomers, polyamides, polyurethanes, polyester elastomers, polyester amides, metallocene catalyzed polyolefins, and blends thereof; and an outer cover layer formed over the inner cover layer, the outer cover layer having a Shore D hardness of no more than 55 as measured on the curved surface thereof, the golf ball having a spin factor of at least 5.

VI. ISSUES (37 C.F.R. § 1.192(c)(6))

Whether claims 46 to 50, 52 and 53 are anticipated under 35 U.S.C. § 102(b) by Nesbitt (4,431,193); and whether claim 51 is obvious under 35 U.S.C. § 103(a) over Nesbitt (4,431,193) in view of Sullivan (5,098,105). Claims 46 to 53 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 42 of U.S. Patent No. 6,213,894, but Appellant stated that a terminal disclaimer to overcome the obviousness-type double patenting rejection would be filed once the other issues have been resolved.

VII. GROUPING OF CLAIMS (37 C.F.R. § 1.192(c)(7))

Claims 46 to 53 are pending, and are grouped as follows:

Claim 46 claims a golf ball comprising a core; an inner cover layer which has a Shore D hardness of at least 60 as measured on the curved surface thereof and is formed from a composition which includes at least one material selected from the group consisting of polyphenylene ether/ionomer blends, ionomers, polyamides, polyurethanes, polyester elastomers, polyester amides, metallocene catalyzed polyolefins, and blends thereof; and an outer cover layer

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formed over the inner cover layer, the outer cover layer having a Shore D hardness of no more than 55 as measured on the curved surface thereof, the golf ball having a spin factor of at least 5. Claims 47 to 53 depend from claim 46 and claim additional features. Claims 46 to 53 stand or fall together.

VIII. ARGUMENTS (37 C.F.R. § 1.192(c)(8))

1. The Examiner's rejection of claims 46 to 50, 52 and 53 as anticipated under 35 U.S.C. § 102(b) by Nesbitt (4,431,193) is erroneous and must be reversed.

The Examiner has rejected claims 46 to 50, 52 and 53 as anticipated under 35 U.S.C. § 102(b) by Nesbitt (4,431,193). The basis for the Examiner's rejection is as follows:

Claims 46-50, 52, and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by Nesbitt (4,431,193). Regarding claims 46, 47 and 50, Nesbitt discloses a golf ball comprising a core, an inner cover layer, and an outer cover layer. The inner cover layer is made from a hard, highly flexural modulus resinous material such as Surlyn 1605, which has a Shore D hardness of 62 (see Yabuki 6,359,066, col 11). The outer cover is made from a soft, low flexural modulus resinous material such as Surlyn 1855, which has a Shore D hardness of 55 (see Yabuki 6,359,066, col 11). The spin factor is inherent since the materials are the same. Regarding claims 48 and 49, the inner cover layer thickness is from 0.020 to 0.070 inch and the outer cover layer thickness is from 0.020 to 0.100 inch (fig 2). Regarding claim 52, the inner cover layer material has a flex modulus of 44,961 psi (Yabuki 6,359,066, col 11). Regarding claim 53, the coefficient of restitution of the core is 0.770 and the coefficient of restitution of the core and inner cover layer is 0.800 or more. Applicant's COR, 0.770 or more, for the ball is an inherent feature of Nesbitt.

(See Office Action of April 16, 2003 pp. 2-3.)

A. The Examiner's Cited References

U.S. Patent No. 4,431,193 to Nesbitt is directed to a golf ball comprising a core and a multi-layer cover, and the inner cover layer comprises a hard, high flexural modulus ionomer, and the outer cover layer comprises a soft, low flexural modulus ionomer. Nesbitt uses as examples of suitable materials for use in the cover layers Surlyn® 1605

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and 1855 ionomers, high and low flexural modulus ionomers respectively, but Nesbitt does not disclose or claim the specific Shore D of the inner cover layer or an outer cover having a Shore D hardness of no more than 55, nor does Nesbitt limit the cover to materials having a specific Shore D. Additionally, Nesbitt does not disclose or claim a spin factor at all.

B. The Subject Matter of Claims 46 to 50, 52 and 53 are not Anticipated By the Cited Art

Claims 46 to 50, 52 and 53 are not anticipated by Nesbitt.

Appellant respectfully disagrees with the Examiner and submits that Nesbitt discloses a golf ball comprising a core and a multi-layer cover, and the inner cover layer comprises a hard, high flexural modulus ionomer, and the outer cover layer comprises a soft, low flexural modulus ionomer. Nesbitt uses as examples of suitable materials for use in the cover layers Surlyn® 1605 and 1855 ionomers, high and low flexural modulus ionomers respectively, but Nesbitt does not disclose or claim the specific Shore D of the inner cover layer or an outer cover having a Shore D hardness of no more than 55, nor does Nesbitt limit the cover to materials having a specific Shore D. Additionally, Nesbitt does not disclose or claim a spin factor at all.

Appellant respectfully submits that the burden is on the Examiner to provide a basis in fact and/or technical reason to reasonably support the determination that the allegedly inherent characteristics necessarily flow from the teachings of the prior art. Inherency must be a necessary result and not merely a possible result. Appellant respectfully submits that the Examiner has failed to support the inherency determination with any facts or technical reasoning.

In order for a prior art reference to anticipate, every element of the claims must be literally present in the reference. At most, Nesbitt discloses the possibility of certain cover features, but Nesbitt does not

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disclose a golf ball having the particular features disclosed and claimed by Appellant.

Since Nesbitt does not disclose all of the elements of Appellant's claims, Appellant respectfully submits that Nesbitt does not anticipate claim 46. Claims 47 to 50, 52 and 53 depend from independent 46, and therefore are also not anticipated by Nesbitt.

2. **The Examiner's rejection of claim 51 as obvious under 35 U.S.C. § 103(a) over Nesbitt (4,431,193) in view of Sullivan (5,098,105) is erroneous and must be reversed.**

The Examiner has rejected claim 51 as obvious under 35 U.S.C. § 103(a) over Nesbitt (4,431,193) in view of Sullivan (5,098,105). The basis for the Examiner's rejection is as follows:

Claim 51 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Nesbitt in view of Sullivan (5,098,105). Nesbitt discloses the invention as shown above but does not disclose an ionomer for the outer layer with a flex modulus from 1,000 to 10,000 psi. Sullivan teaches an ionomer for the outer layer with a flex modulus from 2500 to 3500 psi (col 9, line 47). One skilled in the art would have modified the outer layer material to increase the durability of the golf ball.

(See Office Action of April 16, 2003 p. 3.)

A. The Examiner's Cited References

U.S. Patent No. 4,431,193 to Nesbitt is directed to a golf ball comprising a core and a multi-layer cover, and the inner cover layer comprises a hard, high flexural modulus ionomer, and the outer cover layer comprises a soft, low flexural modulus ionomer. Nesbitt uses as examples of suitable materials for use in the cover layers Surlyn® 1605 and 1855 ionomers, high and low flexural modulus ionomers respectively, but Nesbitt does not disclose or claim the specific Shore D of the inner cover layer or an outer cover having a Shore D hardness of no more than 55, nor does Nesbitt limit the cover to materials having a

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specific Shore D. Additionally, Nesbitt does not disclose or claim a spin factor at all.

U.S. Patent No. 5,098,105 to Sullivan discloses golf balls having a single cover layer formed from a blend of ionomers and maleic anhydride modified thermoplastic elastomers. Sullivan does not disclose a multi-layer cover, or more particularly, a multi-layer cover having an outer cover layer comprising an ionomer with a flex modulus of from 1,000 to 10,000 psi.

B. The Subject Matter of Claims 51 is Patentably Distinguishable Over the Cited Art

Claim 51 is not obvious in light of the combination of Nesbitt and Sullivan.

Appellant respectfully submits that the Examiner has failed to make out a *prima facie* case of obviousness. As discussed above, Nesbitt discloses a golf ball comprising a core and a multi-layer cover, and the inner cover layer comprises a hard, high flexural modulus ionomer, and the outer cover layer comprises a soft, low flexural modulus ionomer, but Nesbitt does not disclose or claim the specific Shore D of the cover layers, nor does Nesbitt limit the cover layers to materials having a specific Shore D.

Sullivan discloses golf balls having a single cover layer formed from a blend of ionomers and maleic anhydride modified thermoplastic elastomers. Sullivan does not disclose a multi-layer cover, or more particularly, a multi-layer cover having an outer cover layer comprising an ionomer with a flex modulus of from 1,000 to 10,000 psi. Appellant respectfully disagrees with the Examiner's statement that "Sullivan teaches an ionomer for a cover layer with a flex modulus from 2500 to 3500 psi." At column 9, line 47, Sullivan teaches an ionomer for use in a cover composition which comprises a blend of the particular ionomer (Iotek[®] 7520) with a hard ionomer, not the use of Iotek[®] 7520 alone as

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an outer cover layer of a multi-layer cover. Additionally Sullivan teaches the blend of ionomers for use in a single cover layer, not the outer cover layer of a multi-layer cover.

In the response to arguments the Examiner stated that "Sullivan clearly teaches the material used for the cover layer of the golf ball, which is equivalent to the outer cover layer of Nesbitt." Appellant respectfully disagrees. As previously discussed, Sullivan discloses the use of an ionomer blend, not the ionomer alone, as stated by the Examiner. Additionally, the use of this ionomer in the blend produces a cover with a Shore D hardness of 64 and 60 (see Table 11, where Iotek[®] 7520 is blended with Iotek[®] 4000 and Iotek[®] 8000). Therefore, even if there was motivation to use the ionomer of Sullivan, the Shore D of the cover layer would be greater than the Shore D of the outer cover layer of the present invention.

Appellant respectfully submit that there is no motivation to combine Nesbitt, which discloses and teaches golf balls having a specific type of multi-layer cover, with Sullivan, which teaches golf balls having a single layer cover formed from a blend of ionomer and maleic anhydride modified thermoplastic elastomers. One skilled in the art would not be motivated to make the golf ball of Nesbitt using the cover of Sullivan since the entire focus of Nesbitt is on a specific type of improved multi-layer ionomer cover for a golf ball. There is no motivation, teaching or suggestion to combine Sullivan with Nesbitt because Sullivan is directed to a particular type of cover made from a blend of ionomer and maleic anhydride modified thermoplastic elastomers, and the cover of Sullivan is a single layer cover with very different properties from the multi-layer cover of Nesbitt. Even if the cover of Sullivan was substituted for the cover of Nesbitt, a golf ball having a single layer cover comprising a blend of materials would be produced, not a golf ball having an outer cover layer comprising an

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ionomer with a flex modulus of 1,000 to 10,000 psi and a Shore D hardness of no more than 55.

The Examiner's cited references neither teach nor suggest the golf ball of claim 51.

IX. CONCLUSION

In view of the above, Appellant respectfully submits that claims 46 to 53 are not anticipated by or are non-obvious and patentable over the cited references. Accordingly, it is respectfully requested that the Examiner's rejection of claims 46 to 53 be reversed.

Respectfully submitted,

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APPENDIX A

The claims standing on appeal are:

46. A golf ball comprising:
a core;
an inner cover layer which has a Shore D hardness of at least 60 as measured on the curved surface thereof and is formed from a composition which includes at least one material selected from the group consisting of polyphenylene ether/ionomer blends, ionomers, polyamides, polyurethanes, polyester elastomers, polyester amides, metallocene catalyzed polyolefins, and blends thereof; and
an outer cover layer formed over the inner cover layer, the outer cover layer having a Shore D hardness of no more than 55 as measured on the curved surface thereof, the golf ball having a spin factor of at least 5.
47. The golf ball according to claim 46, wherein the ball has a spin factor of at least 8.
48. A golf ball according to claim 46, wherein the outer cover layer has a thickness of from about 0.01 to about 0.10 inches.
49. A golf ball according to claim 46, wherein the inner cover layer has a thickness of from about 0.01 to about 0.10 inches.
50. A golf ball according to claim 46, wherein the inner cover layer is formed from a composition which includes at least one material selected from the group consisting of a high acid ionomer, a low acid ionomer, a blend of high acid and low acid ionomers, a non-ionic thermoplastic, and combinations thereof.
51. A golf ball according to claim 46, wherein the outer cover layer has a flex modulus of from about 1,000 to about 10,000 psi.

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52. A golf ball according to claim 46, wherein the inner cover layer has a flex modulus of at least 30,000 psi.

53. A golf ball according to claim 46, wherein the golf ball has a coefficient of restitution of at least 0.750.